

SUBSTITUTE FORM PTO-1449
(MODIFIED)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
06816/005002SERIAL NO.
~~08/478,801~~INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Use several sheets if necessary)

(37 CFR 1.98(b))

APPLICANT
SURAMPUDI et al.FILING DATE
~~June 7, 1995~~

6/13/01

GROUP 1795
UnassignedPTO
09/881222
J1040 U.S. PAT. 06/13/01

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
OK	AA	3 0 1 3 9 0 8	12/1961	Luck et al.			
OK	AB	3 1 1 3 0 4 9	01/1961	Worsham			
OK	AC	3 3 6 8 9 2 2	02/1968	Salzer			
OK	AD	4 2 6 2 0 6 3	04/1981	Kudo et al.	429	41	
OK	AE	4 3 9 0 6 0 3	06/1983	Kawana et al.	429	30	
OK	AF	4 4 0 7 9 0 5	10/1983	Takeuchi et al.	429	42	
OK	AG	4 4 2 0 5 4 4	12/1983	Lawson et al.	429	42 X	
OK	AH	4 4 7 8 9 1 7	10/1984	Fujita et al.	429	33	
OK	AI	4 5 3 7 8 4 0	08/1985	Tsukui et al.	429	33	
OK	AJ	4 5 6 2 1 2 3	12/1985	Shimizu et al.	429	27	
OK	AK	4 6 1 2 2 6 1	09/1986	Tsukui et al.	429	13	
OK	AL	4 6 2 9 6 6 4	12/1986	Tsukui et al.	429	23	
OK	AM	4 8 2 8 9 4 1	05/1989	Sterzel	429	33	
OK	AN	4 8 7 6 1 1 5	10/1989	Raistrick	427	165	
OK	AO	5 1 8 6 8 7 7	02/1993	Watanabe	429	42 X	
OK	AP	5 3 3 0 8 6 0	07/1994	Grot et al.	429	33	

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

OK	AQ	"Studies of the Electro-oxidation of Methanol and Formaldehyde at Carbon-supported Platinum and Platinum Alloy Electrodes" The Electrochemical Society, Inc., R. Knieler, G. Stolp, G.S. Prakashand and G. Olah, October 11 - 16, 1992
OK	AR	"Fuel Cell Update" Popular Science, P.J. Skerrett, June 1993
OK	AS	"Applications of the Gas Diffusion Electrode to a Backward Feed and Exhaust (BFE) Type Methanol Anode" Masahiro Watanabe, Makoto Uchida and Satoshi Motoo, J. Electroanal. Chem., 199 (1986) 311-322 (Motoo)
OK	AT	"The Use of Thin Films of Sulphonated Fluoro-Polymers for Improvements in the Activity and Durability of Pt Electrocatalysts for Methanol Electrooxidation" Masahiro Watanabe, Takeshi Takahashi and Hideaki Kita J. Electroanal. Chem., 284 (1990) 511-515 (Motoo)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 2 of 5

SUBSTITUTE FORM PTO-1449 (MODIFIED)		DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 06816/005002		SERIAL NO. 08/478,801 <u>09/881222</u>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				APPLICANT: Surampudi, et al.		FILING DATE 06/07/97 <u>6/13/01</u>	
				GROUP UNKNOWN <u>1743</u>			
(37 CFR 1.98(b))							
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	AA	PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
OK		3 1 4 3 4 4 0	08/04/64	H. HUNGER ET AL.			08/04/60
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION							
		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION YES NO
OK	AL	59-209277	04/04/85	Japan			X
OK	AM	60-165062	01/07/86	Japan			X
OK	AN	63-076264	08/22/88	Japan			X
OK	AO	02-148657	08/24/90	Japan			X
OTHER DOCUMENTS (including Author, Title, Date, Place of Publication)							
OK	AQ	Narayanan et al. "Implications of Fuel Crossover in Direct Methanol Fuel Cells", Extended Abstracts Fall Meeting October 10-15, vol. 93/2, pps 126/127, New Orleans 1993.					
OK	AR	Kosek et al. "A Direct Methanol Oxidation Fuel Cell", Proceeding of the 28th Intersociety Energy Conversion Engineering Conference, vol. 1, pps 1.1209 - 1.1214, Atlanta 1993.					
OK	AS	Hammet et al. "Electrocatalysis and the Direct Methanol Fuel Cell", Chemistry and Industry, Chemistry and Industry Review, No. 13, pps 480-483, 7/6/92.					
OK	AT	Sawodzinski et al. "Methanol Cross-Over in DMFC's: Development of Strategies for Minimization", Extended Abstracts Spring Meeting 1994 St. Louis, MO., vol. 94/2, pg. 960, 1992					
EXAMINER				DATE CONSIDERED			
				<u>5/7/03</u>			
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Substitute Disclosure Form (PTO-1449)

SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 06816/005002
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		SERIAL NO. 08/78,801 09/881222
(37 CFR 1.98(b))		APPLICANT: Surampudi et al.
FILING DATE June 7, 1995 6/10/01		GROUP 1745

31040 U.S. PTO
09/881222
06/13/01

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA	3 1 4 3 4 4 0	08/04/64	Hunger et al.			
OK AB	3 0 1 3 0 9 8	12/12/61	Hunger et al.			
OK AC	4 4 9 3 8 7 8	01/15/85	Horiba et al.			
OK AD	5 5 9 9 6 3 8	02/04/97	Surampudi et al.	429	33	
AE						

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
AF	JP 59209277	11/27/84	Japan				
AG	JP 60165062	08/28/85	Japan				
AH	JP 63078264	04/06/88	Japan				
AI	JP 02148657	06/07/90	Japan				
OK AJ	JP 06188008	07/08/94	Japan				
OK AK	EP 0241432	10/14/87	Europe				
OK AL	DE 4243600	07/01/93	Germany				
OK AM	JP 6251779	09/09/94	Japan				
OK AN	JP 54076443	06/09/79	Japan				
OK AO	FR 1436154	07/01/66	France				

OTHER DOCUMENTS (including Author, Title, Date, Place of Publication)

OK AP	Narayanan et al., Implications of fuel crossover in direct methanol fuel cells, 10/93, Extended Abstracts Fall Meeting, vol. 93/2, pg.126/127
OK AQ	Kosek et al., A direct methanol oxidation fuel cell, 08/93, Proceedings of the 28th Intersociety Energy Conversion Engineering Conference, vol.1
OK AR	Hamnett et al., Electrocatalysis and the direct methanol fuel cell, 07/92, Chemistry and Industry Chemistry and Industry Review, no. 13, pg. 480-483
OK AS	Narayanan et al., Studies on the electro-oxidation of methanol and formaldehyde at carbon-supported platinum and platinum alloy electrodes, 1992, Extended Abstracts Fall Meeting, vol. 92, no.2, pg. 78-79 (OK)
OK AT	Zawodzinski et al., Methanol cross-over in DMFC'S: Development of strategies for minimization, 10/92, Extended Abstracts Spring Meeting, vol. 94/2, pg.960
OK AU	Poltarzewski et al., Nafion distribution in gas diffusion electrodes for solid-polymer -electrolyte-fuel-cell applications, 03/92, Journal of the Electrochemical Society, vol.139, no.9,pg761-765
OK AV	Surampudi et al., Advances in direct oxidation methanol fuel cells, 01/94, Journal of Power Sources, vol.47, no.3,pg.377-385

8/7/03

SK	AX	Watanabe, Improvement of performance and durability of anode for direct methanol fuel cells, 1992, Proceedings of the Workshop on Direct Methanol-Air Fuel Cells, vol.92-14
EXAMINER	SJK	DATE CONSIDERED 5/7/93 (5/10/93) (SJK)
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		

Substitute Disclosure Form (PTO-1449)

4 of 5

09/881222